REMARKS

In view of the above amendments and the following remarks, favorable reconsideration of the outstanding office action is respectfully requested.

According to the Response filed on January 31, 2003 by Applicants, in response to a restriction requirement issued by the Examiner, claims 20-27 have been withdrawn from consideration. As a result, claims under consideration currently are claims 1-19.

1. Rejections under 35 U.S.C. § 102

I. Item 3 of the Detailed Action

In this Item, the Examiner rejected claims 1-3 and 5-15 under 35 U.S.C. § 102(b) as being anticipated by Trotter, Jr. (United States Patent No. 5,807,616 A).

With respect to claim 1, the Examiner asserted that

> [Trotter, Jr.] discloses a furnace component which is exposed to a hydrocarbon containing gas stream, comprising an inorganic material (col. 5, lines 53-69); where at least a portion of the exposed inorganic material comprises a catalyst that promotes a hydrocarbon reaction to produce an olefin (col. 1, lines 16-19).

Applicants respectfully traverse this rejection.

Whereas Trotter, Jr. is concerned with inorganic coatings for metallic tubings used in thermal cracking processes, it nonetheless does not disclose the subject matter as claimed in claim 1 of the present application. Column 1, lines 16-22 of Trotter, Jr. are provided as follows:

> The invention is concerned with improvements in the thermal cracking of hydrocarbons, such as ethane, propane, naphtha, or gas oil to form olefins, such as ethylene, propylene, or butanes. It is particularly concerned with avoiding, or at least lessening, the formation of carbon deposits, commonly referred to as coke, on a reactor element wall during a thermal cracking process.

From the language of this paragraph, Applicants do not see any explicit disclosure as to catalyst carried on the inorganic material. Therefore, the Examiner must regard this paragraph as implicitly disclosing catalyst. Applicants respectfully disagree with this reading. Trotter, Jr. is concerned with using the inorganic coating to inhibit coke deposition on the otherwise exposed tubing surface. Catalyst for promotion of thermal cracking is not required on such coking-inhibitive coating. Indeed, Trotter, Jr. is silent on carrying catalyst

on the surface of the inorganic coating. Applicants respectfully submit that in processes where catalyst is required, it is not required to be carried by the inorganic coating in Trotter, Jr. Rather, the catalyst may be installed inside the tubing, separate and independent from the inorganic coating as disclosed therein.

Claim 1 of the present application requires that "at least a portion of the exposed inorganic material comprises a catalyst that promotes a hydrocarbon reaction to produce an olefin." Therefore, contrary to the Examiner's assertion, Trotter, Jr. does not disclose the present inventive furnace component as claimed in claim 1, either explicitly or implicitly.

Claims 2, 3 and 5-15, all dependent from claim 1, should therefore NOT be anticipated by Trotter, Jr. The Examiner's rejections thereof are thus traversed accordingly.

2. Rejections under 35 U.S.C. § 103

II. Item 6 of the Detailed Action

In this item, the Examiner rejected claims 16-19 under 35 U.S.C. § 103(a) as being unpatentable over Trotter, Jr. (United States Patent No. 5,807,616A).

The Examiner asserted that

> [w]ith respect to claim 16, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add a second catalyst since the duplication of existing elements is well within the skill in the art. It is held that the duplication of the above disclosed elements would inherently function to promote carbon gasification.

Again, Applicant submits that Trotter, Jr. does not disclose or suggest the application of a catalyst on the exposed inorganic coating, much less a catalytic system comprising two catalysts.

With respect to claim 17-19, the Examiner asserted that "[Trotter, Jr.] discloses wherein the catalyst is chosen from the group consisting of rare earth metals, precious metals, transition metals, non-metals and their corresponding compounds (col. 3, lines 54-60)." Applicants respectfully disagree. Col. 3, lines 54-60 of Trotter, Jr. are provided as follows:

> Any glass-ceramic material that meets these several conditions may be employed. The alkaline earth metal borates and borosilicates and alkaline earth metal silicates are particularly suitable. In general, based on properties, alkali metal silicates and aluminosilicates are less suitable due to physical and/or chemical incompatibility, including low coefficient of thermal expansion.

Applicants submit that this paragraph discloses the composition of the inorganic coating, not the composition of the catalyst.

With regard to the catalyst, the Examiner's attention is particularly directed to the description from line 27, page 6 to line 2, page 8 of the present application. The Examiner will appreciate that the description of Trotter, Jr. quoted above does not apply to the catalyst of the present application.

III. Item 7 of the Detailed Action

In this item, the Examiner rejected claim 4 under 35 U.S.C. § 103(a) as being unpatentable over Trotter, Jr. (United States Patent No. 5,807,616A) further in view of Muckelroy (United States Patent No. 3,812,442A).

The Examiner asserted that though Trotter, Jr. teaches "borosilicates are a glass-ceramic material which can be used, [Trotter, Jr.] is silent as to a composition as claimed. Muckelroy teaches wherein a borosilicate with MgO and P_2O_5 in the weight percents claimed are common types of borosilicates known." Thus the Examiner held that the claim 4 was obvious.

Applicants respectfully traverse this rejection.

Regardless of the Examiner's assertion supra regarding the disclosure of borosilicate glass-ceramic material, since Trotter, Jr. does not disclose or suggest that catalyst is carried on the exposed inorganic material, the combination of Trotter, Jr. and Muckelroy does not render claim 4 obvious.

3. Conclusion

Based upon the above amendments, remarks, and papers of record, Applicants believe the pending claim 1-19 of the above-captioned application are in allowable form and patentable over the prior art of record. Applicants respectfully request reconsideration of the pending claims 1-19 and a prompt Notice of Allowance thereon.

Applicant believe that a one-month extension of time is necessary to make this Response timely. Should Applicant be in error, Applicant respectfully requests that the Office grant additional time extension pursuant to 37 C.F.R. § 1.136(a) as necessary to make this Response timely, and hereby authorizes the Office to charge any necessary fee or surcharge with respect to said time extension to the deposit account of the undersigned firm of attorneys, Deposit Account 03-3325.

The undersigned attorney is granted limited recognition by the Office of Discipline and Enrollment of the USPTO to practice before the USPTO in capacity as an employee of Corning Incorporated. A copy of the document granting such limited recognition is submitted herewith for the record.

Please direct any questions or comments to the undersigned at (607) 248-1253.

Respectfully submitted,

CORNING INCORPORATED

Date: August 25, 2003

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Limited Recognition
Corning Incorporated
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Corning, NY 14831

Date of Deposit: August 25, 2003

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date indicated above with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Christine M. Samson